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Missoula, Montana
December 5, 1949

MEMORANDUM FOR SMOKEJUMPERS - GROUP OF 1949:

An insufficient number of copies of the Report of the Board of Review were received from our Washington office to enable us to furnish each smokejumper with a copy.

No doubt you have been and will continue to be asked numerous questions about the Mann Gulch disaster. I believe that most of you were well briefed regarding this tragedy before leaving the job this fall. However, to fill in any gaps in your information, the attached digest of the Report of the Board of Review is being sent you.

P. D. HANSON, Regional Forester

By  Acting

RESUME OF REPORT BY BOARD OF REVIEW
Mann Gulch Fire

Intensified research in fire behavior to furnish more dependable bases for anticipating fire "blow-ups" and intensified training of men to meet such emergencies are recommended in the report of a special board that investigated the disastrous Mann gulch fire last August north of Helena, which the forest service has just made public, announced P. D. Hanson, region No. 1 forester, October 31, 1949.

The Mann gulch blaze, one of the worst forest fire tragedies in recent years, cost the lives of 13 fire fighters, said Mr. Hanson. It burned over approximately five thousand acres of timber and watershed land before it was brought under control.

The board of review found no evidence that those responsible for the action of the fire fighting crew disregarded elements of risk which they are expected to consider, the report said.

Although recognizing that training of smoke jumpers (fire fighters trained in parachute jumping) and other regular forest service fire suppression personnel has included instructions on how to recognize dangerous fire fighting conditions and the importance of following leaders in emergencies, the board recommended that even greater emphasis be given in fire fighter training to both these factors.

The board found that the character of the country and the location and behavior of the Mann gulch fire at the time the smoke jumpers landed presented no indications of hazards beyond those often encountered by fire suppression forces. The sudden explosive runs of the fire across the lower end of Mann gulch could not reasonably have been expected, the board stated.

The board of review met in Missoula under the chairmanship of C. M. Granger, assistant chief, forest service, in charge of national forest administration. Other members were H. D. Cochran, chief of forest service personnel management; Jay H. Price, regional forester, north central region; Lawrence K. Mays, assistant regional forester, Pacific northwest region; and J. Malcolm Loring, supervisor, Chelan national forest, Wash. Technical advisers were C. A. Gustafson, chief, division of fire control, forest service; and Francis Lufkin, smoke jumper foreman, Chelan national forest.

The board made a study of the fire area from the air and on the ground, following which hearings were conducted in Missoula for several days. Eighteen witnesses were heard, including all of those who had responsible parts in the fire control and rescue operations at the Mann gulch fire. Relatives of the deceased fire fighters living nearby in the Montana area were invited to appear before the board if they wished to do so. Henry Thol, father of Henry J. Thol, Jr., who died during the fire, appeared before the board.

According to the board's findings, the fire was discovered shortly after noon on August 5, 1949, in Mann gulch near the Missouri river, about 20 miles north of Helena in one of the roughest areas east of the continental divide. Because of the rough topography and inaccessibility, Supervisor Arthur D. Moir, Jr., and Ranger J. Robert Jansson of the Helena national forest requested a crew of smoke jumpers from the regional headquarters in Missoula to be delivered to the fire by air. A ground crew of 20 local fire fighters also was dispatched to the fire on foot.

The smoke jumper plane reached the fire area around 3:10 p.m. Fifteen men were safely landed by parachute on the slope on the opposite side of Mann gulch about half a mile from the fire. All cargo dropping of food, tools, and other equipment was completed by 4:08 p.m. Cargo was collected by about 5 p.m., at which time Foreman R. Wagner Dodge heard a shout from someone near the fire. He instructed his

crew to follow him to the fire and proceeded ahead to determine who it was that was calling. The foreman met Ground Patrolman James O. Harrison near the fire a few minutes later.

Mr. Dodge concluded that the fire was too warm for attack at this point and with Harrison rejoined his crew a few minutes later. He instructed the crew to cross to the opposite side of Mann gulch from the fire and proceed toward the Missouri river grading out of the bottom of the draw as they went, in order to be in a position to watch the north flank of the fire. It was his plan to get to the river from whence he would be able to attack the fire from the rear, thus assuring safety for his men while working on the fire.

About 5:45 p.m. the foreman noted that a fire was established across Mann gulch on the opposite side of the draw from the main fire and about 750 feet in front of the crew. Seeing that they were cut off from the river, he instructed his crew to reverse directions and proceed towards the top of Mann gulch ridge.

After proceeding about 2,000 feet the fire had advanced to only a few hundred feet behind the crew. At this point the crew had broken out of scattered pine timber and were in an open grass area. Realizing that there would not be sufficient time to reach the ridge, where safety was a real possibility, the foreman explained to those nearest him that he would set a fire in the grass cover and after letting it burn a brief period they would seek safety inside the burned area.

The escape fire was immediately started by dropping a match in the grass but the crew, apparently believing they could make the ridge, continued in that general direction, despite repeated shouts by the foreman to the men as they passed for them to come inside the burned-over area of the escape fire. Two men made it safely over the ridge. The foreman found safety in the area he had set on fire and also survived.

Shortly thereafter or about 6 p.m., 13 of the remaining crew members were caught in the onrush of flames from the main fire. Eleven died immediately and two others died later in the hospital at Helena. Twelve of the men were smoke jumpers and one was the fire patrolman who had joined the crew on foot.

Spread of the fire was stopped on August 7 and complete control was established August 10. A total of 450 men worked on the fire.

The survivors and one of the men who later died in the hospital said they believed all of the men would have been saved if they had followed the foreman's lead in getting into the area burned by the escape fire. The board of review recommended that fire fighter training include training in the use of escape-fire methods, even though occasions for the use of this method are relatively rare.

U. S. DEPARTMENT OF AGRICULTURE

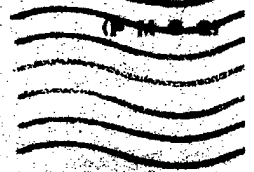
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